

KINGSTON GRANITE.

MONTREAL, 3rd July, 1876.

The Property alluded to below, is situated on 'Dead Man's Bay,' in Kingston Harbour, its frontage being in deep water. Vessels delivering cargo at Kingston from the West could take this granite as return freight at a very low rate; while convict labor from the Penitentiary would reduce the cost of mining and adapting it to monumental and other purposes. There would be no cost for transport from the quarry to the vessel, as the stone can be swung from the one into the other.

Report by Robert Bell, Esq., C.E., F.G.S., of the
Geological Survey of Canada.

TORONTO, June 15th, 1876.

HONORABLE JOHN YOUNG,
Montreal.

DEAR SIR—In reference to the granite locality adjoining the harbor of Kingston, although I was well acquainted with the geology of the neighborhood, from having resided several years at Kingston, still I made a special visit to the place the other day in order to obtain the particulars which you asked for.

The granite is found along the north side of the eastern arm of the harbor near Fort Henry. It occurs as an isolated intrusive mass, and is flanked to the south-eastward by Laurentian gneiss, and overlaid in other parts by limestone of Lower Silurian age. The main mass runs northward, and is exposed for a length of nearly one-third of a mile, with a breadth of nearly 100 feet. But in addition to this main mass, there are parallel intrusions or spurs on the south-east side, which increase the total width considerably. This is the only exposure of granite which occurs in the vicinity, with the exception of the point on the south side of the arm of the harbor and Cedar Island, at its extremity, (which are composed of gneiss), the horizontal beds of Silurian limestone extend for miles in all directions.

I ascertained the height of the summit of the granite exposure by means of both the barometer and the spirit-level, and found the mean of the two to be eight-seven (87) feet.

The position has great natural advantages for a quarry from which to export granite, as it presents a steep face immediately overlooking deep water in a well sheltered situation. As is usual with granites, the rock is here divided by joints which run at right angles to each other, and occur at various distances apart, so as to afford blocks of almost any required size.

I have seen hammer-dressed and also polished specimens of this granite, from which I have formed a very high opinion, both of the quality and the color of the rock. It has the characters of a "Silver-stone," dresses easily and accurately under the hammer, and takes a very fine polish. It is composed of crystalline, red feldspar, with grains of beautiful bluish white quartz, and a little dark green horn blende, the whole having a medium texture as to fineness. The general appearance of a polished surface is that of a deep salmon-red of a very clear and pleasing tone.

Hoping that the foregoing will be found to answer your enquiries,

I remain,

Dear Sir,

Yours truly,

ROBERT BELL.

QUEEN'S UNIVERSITY,

KINGSTON, June 19th, 1876.

HON. JOHN YOUNG,

DEAR SIR—In compliance with your request as communicated to me through Robert Bell, C.E., I made an examination of the granite exposed upon the border of "Dead Man's Bay."

The mass, as exposed, forms a sort of lenticular shape, being wide in the middle and tapering off towards each extremity. The medium line of its length is nearly north and south, and is situated somewhat obliquely to the shores of the bay, but throughout the greater portion of the length the mass rises abruptly from the water line, forming a steep hill. The length is between 580 and 600 yards, and the width at the widest point about 100 yards.

The mass rises irregularly, forming at places steps or tables of different elevations; but these are mostly nearly the top. The extreme height is about 30 yards above the water surface of the bay.

The whole mass forms a conspicuous hill, the ground descending from it upon three sides, and the water bounding its foot upon the fourth. On the side next the water the granite is in a few places intersected with bands of gneiss, which are tilted almost upon edge, and run nearly parallel to the general exposure, but towards the summit the gneiss completely disappears.

The cleavage joints, as far as can be observed, run mostly parallel to, or at right angles to the general direction of the longer axis of the mass, and seem to offer every facility for convenience in quarrying.

The granite is composed of an orange-red feldspar, beautifully interspersed with white quartz and greenish-black horn blende, and is in my opinion a very beautiful article.

Dead Man's Bay at this point is sufficiently deep to float medium-sized vessels, and especially flat-bottomed ones, and opens out directly into Kingston Harbor.

While the most of the granite, and probably the great mass, is such as I have described above, a grey variety is found in some places near the water's edge.

I enclose you a sketch of the locality, drawn from memory, and without measurements, but which will serve to give an idea of the position of the granite, &c.

I remain, Sir,

Your obedt. servt.,

N. F. DUPUIS.

MONTREAL, June 23rd, 1876.

HON. JOHN YOUNG,

DEAR SIR—I have cut and polished the specimen pieces of granite which you have sent me from "Dead Man's Bay," near Kingston, and will send them to your office, or elsewhere, as soon as advised. What little work has been done, satisfies me that the material is eminently suitable for Monumental and Building purposes; it is free and even in the cleavage, stands the hammering well, (being so close in the texture that bruising cannot occur), and for the same reason can be worked into lines almost as fine and sharp as in marble.

A higher polish than shown on specimen piece can be had and would obtain if polished by power; those sent, being small, have been done by hand.

The close proximity of this granite to such a water communication, is a most valuable feature to any individual or company, who might work it, and in my opinion, particularly valuable for a Western Trade.

A large quantity of Scotch Granite shipped from Glasgow, after paying railway carriage from Aberdeen to that point, arrives here every year for reshipment to the West; and such is the trade now, that we find it an advantage to keep the stock in bond ready to fill Western Orders. By the time it is reshipped from here, the charges for freight and handling form a serious item in the cost of it, enough for a good profit.

All of those expenses would, of course, be saved in working this.

Yours truly,

ROBERT REID.